

IN THE SPECIFICATION

Amend the paragraph on page 5, lines 1-23 to read:

In a particularly preferred embodiment the present invention provides a process for the gas phase polymerization of ethylene and one or more C₃₋₈ copolymerizable alpha olefin monomers in the presence of a supported Ziegler-Natta catalyst comprising an aluminum compound of the formula Al((O)_aR¹)_bX_{3-b} wherein a is either 0 or 1, b is an integer from 1 to 3, R¹ is a C₁₋₁₀ alkyl radical and X is a chlorine atom, a titanium compound of the formula $\text{Ti}(\text{OR}^2)_c\text{X}_{4-c}$ Ti(OR²)_cX_d wherein R² is selected from the group consisting of a C₁₋₄ alkyl radical, a C₆₋₁₀ aromatic radical, and a radical of the formula -COR³ wherein R³ is selected from the group consisting of a C₁₋₄ alkyl radical and a C₆₋₁₀ aromatic radical, X is selected from the group consisting of a chlorine atom and a bromine atom, c is 0 or an integer up to 4 and d is an integer up to 4 and the sum of c+d is the valence of the Ti atom; a magnesium compound of the formula (R⁵)_eMg X_{2-e} wherein each R⁵ is independently selected from the group consisting of C₁₋₄ alkyl radicals and e is 0, 1 or 2, a C₁₋₆ alkyl halide and optionally an electron donor, a molar ratio of Al:Ti from 1:1 to 15:1; a molar ratio of Mg:Ti from 1:1 to 20:1; a molar ratio of halide from the alkyl halide to Mg from 1:1 to 8:1; and a molar ratio of electron donor to Ti from 0:1 to 15:1; said catalyst being co-catalyzed with tri C₂₋₆ aluminum, the improvement of controlling the molar ratio of total Al from the catalyst and co-catalyst:Ti from the catalyst from 25:1 to 80:1 and the feed of said tri C₂₋₆ alkyl aluminum from the co-catalyst to the reactor to provide from 10 to 50 ppm of aluminum (Al ppm) based on the polymer production rate.

Amend the paragraph on page 12, line 13- page 13, line 2 to read:

Then the impregnated support is reacted with a titanium compound, and optionally an electron donor and an aluminum compound. These types of approaches are illustrated by ICI's U.S. patent 4,252,670 issued February 24, 1981 to Caunt et al.; U.S. patent 5,633,419 issued April 1997 to Spencer et al. assigned to the Dow Chemical Company; EP 0 595 574 issued January 1, 1997 in the name of Berardi, assigned to BP Chemicals Ltd.; and U.S. patent 6,140,264 issued October 31, 2000 to Kelly et al., assigned to NOVA Chemicals Ltd.

The present invention is applicable to Ziegler-Natta catalysts made using the above techniques provided the catalyst is activated in the reactor (sufficient tri C₂₋₆ alkyl aluminum is added to the reactor) in accordance with the teachings herein.

Typically the Ziegler-Natta catalyst will comprise an aluminum compound of the formula $Al((O)_aR^1)_bX_{3-b}$ wherein a is either 0 or 1, b is an integer from 1 to 3, R¹ is a C₁₋₁₀ alkyl radical and X is a chlorine atom, a titanium compound of the formula $Ti(OR^2)_cX_{4-c}$ $Ti(OR^2)_cX_d$ wherein R² is selected from the group consisting of a C₁₋₄ alkyl radical, a C₆₋₁₀ aromatic radical, and a radical of the formula -COR³ wherein R³ is selected from the group consisting of a C₁₋₄ alkyl radical and a C₆₋₁₀ aromatic radical, X is selected from the group consisting of a chlorine atom and a bromine atom, c is 0 or an integer up to 4 and d is an integer up to 4 and the sum of c+d is the valence of the Ti atom; a magnesium compound of the formula $(R^5)_eMg X_{2-e}$ wherein each R⁵ is independently a C₁₋₄ alkyl radical and e is 0, 1 or 2; an alkyl halide selected from the group consisting of CCl₄ or a C₃₋₆ secondary or tertiary alkyl halide and optionally an electron donor, a molar

ratio of Al to Ti from 1:1 to 15:1; a molar ratio of Mg:Ti from 1:1 to 20:1; a molar ratio of halide from the alkyl halide to Mg from 1:1 to 8:1; and a molar ratio of electron donor to Ti from 0:1 to 15:1.